

1119.01 Description. Additional excavation shall consist of excavation necessitated by a change in specified profile grade or unused trench because of changes in alignment ordered by the C.W.W. Inspector. Additional excavation required to remove unsuitable soil shall also be compensated for under this item.

Except as compensated by this item, there will be no additional compensation for rock excavation necessitated by a change in grade or alignment.

1119.02 Construction Requirements. The Contractor shall excavate to the specified lower grade or altered alignment, in a manner to conform to all of the requirements specified in Items 1100 and 1101.

1119.03 Method of Measurement. The measured volume shall be the volume of material in its original position prior to excavation as determined by field measurements.

The depth considered by a change in the specified profile grade will be the depth below the bottom of the trench as shown on the plan profile when available. Otherwise, the depth considered will be the nominal depth as specified in 1101.04. Trench width considered will be as specified in 1101.04.

The depth considered in the event of unused trench will be the actual depth from the existing grade to the bottom of the trench. Trench width will be as specified in 1101.04.

The additional backfill required because of additional excavation is also compensated for in this item.

1119.04 Basis of Payment. Payment shall be considered full compensation for all labor, material, and equipment required for the additional excavation including the removal of sidewalk, street pavement, sod, or any other surface as described above.

The contractor shall be compensated for restoration of any unused trench in accordance with the Public Works complete restoration schedule of charges in effect at the time the restoration is performed. This Item will not cover excavation which is included as part of any other contract item.

Payment will be made at the contract price for:

Item	Unit	Description
1119	Cubic Yard [meter]	Additional Excavation

ITEM 1120 - EXPLORATORY EXCAVATION

1120.01 Description

1120.02 Material

1120.03 Construction Requirements

1120.04 Method of Measurement

1120.05 Basis of Payment

1120.01 Description. The Contractor shall excavate test holes which are of an exploratory nature as directed by the Cincinnati Water Works Inspector. This item shall include excavations necessary to determine locations of Cincinnati Water Works facilities, existing piping materials, locations of any utility facilities, or any other excavation designed to obtain information which will aid the progress of the project.

1120.02 Material. All material required for backfilling shall conform to Item 1101.07, "Laying Pipe and Fittings - Backfilling."

1120.03 Construction Requirements. The Contractor shall remove any sidewalk, street pavement, sod, or any other surface; excavate to determine the information for which the excavation was made; and backfill the excavation. This item shall cover excavation performed by hand digging or by a mechanical means.

1120.04 Method of Measurement. The unit of measurement shall be the cubic yard [meter]. The measured volume shall be the volume of material in its original position prior to excavation as determined by field measurements. Sidewalks, street pavement, sod, or any other surface will be included in this measurement.

1120.05 Basis of Payment. Payment shall be considered full compensation for all labor, material, and equipment required for the removal of sidewalk, street pavement, sod or any other surface and the backfilling of the excavation. The Contractor shall be compensated for restoration of the excavation in accordance with the Public Works complete restoration schedule of charges in effect at the time the restoration is performed. This item will not cover excavation which is included as part of any other contract items.

Payment will be made at the contractor price for:

Item	Unit	Description
1120	Cubic Yard. [meter]	Exploratory excavation

ITEM 1121 - FILLING ABANDONED WATER WORKS STRUCTURES**1121.01 Description****1121.02 Material****1121.03 Construction****1121.04 Method of Measurement****1121.05 Basis of Payment**

1121.01 Description. This item shall cover the labor, material, and equipment required to abandon existing Water Works structures as indicated on the Plans or as directed by the C.W.W. Inspector.

1121.02 Material. Backfill material required for this operation shall be Low Strength Mortar backfill: Class LSM-50.

1121.03 Construction. Structures that are to be abandoned as a part of this project will be so noted on the Plans. All castings abandoned become the property of the Contractor, and shall be removed from the job site.

When the structures extend into the upper foot [.305 meter] of the finished subgrade or ground surface, they shall be removed to a minimum of one foot [.305 meter] below these limits.

All remaining cavities shall be backfilled with the proper material specified above.

1121.04 Method of Measurement. The volume of material paid for under this item shall be the number of cubic yards [meters] of backfill required to fill the resulting cavities to the subgrade or ground surface as required.

1121.05 Basis of Payment. The unit price bid for filling abandoned Water Works structures will be full compensation for all labor, material, and equipment required to perform the operation as described above.

Payment will be made at the contract price for:

Item	Unit	Description
1121	Cubic Yards [meters]	Filling Abandoned Water Works Structures

ITEM 1122 - REMOVING EXISTING MANHOLE CURBS AND COVERS AND VALVE BOXES

1122.01	Description
1122.02	Construction
1122.03	Method of Measurement
1122.04	Basis of Payment

1122.01 Description. This item shall cover the removal of existing manhole curbs and covers or valve boxes that are located in areas where the existing pavement is to remain, backfilling all remaining cavities, and restoration of the paving.

1122.02 Construction. The Contractor shall remove existing valve boxes and lids, including the telescope, when so directed by the C.W.W. Inspector, and manhole curbs and covers, and remove them from the Project.

The procedure for the backfilling shall be as specified in Item 1121 "Filling Abandoned Water Works Structures."

The resulting void in the pavement shall be restored to conform to the adjacent surface.

1122.03 Method of Measurement. The Contractor will be paid for each manhole curb and cover or valve box that is ordered removed. For each manhole curb and cover removed backfill material required in excess of (2) cubic yards [1.53 cubic meters] will be paid for under Item 1121.

1122.04 Basis of Payment. The payment for the removing of existing manhole curbs and covers and valve boxes will be paid for at the unit price bid, which payment will be full compensation for all labor, material and equipment necessary to perform the work described above.

Payment will be made at the contract price for:

Item	Unit	Description
1122	Each	Removing Existing Manhole Curbs and Covers
1122	Each	Removing Existing Valve Boxes

ITEM 1123 - CHANGING PIPE SEWERS

1123.01 Description

1123.02 Material

1123.03 Construction

1123.04 Measurement

1123.05 Basis of Payment

1123.01 Description. The Contractor shall furnish all necessary labor, material, tools, and equipment required to change the grade or alignment of pipe sewers of various sizes, allowing installation of water mains and appurtenances as shown on the Plans, or as directed by the C.W.W. Inspector. This work shall include all necessary excavation, backfill, and restoration.

1123.02 Material. All material shall conform to the specifications stated in Item 603, and shall be furnished by the Contractor.

1123.03 Construction. All construction required for the changing of pipe sewers shall conform to Item 603, or to the satisfaction of the political subdivision having jurisdiction.

1123.04 Measurement. The Contractor is responsible for all pipe sewers disturbed in the completion of this project, and all pipe sewers exposed in his operations shall be restored in an equal or better condition when he has finished his work.

Any sewer pipe that is broken or disturbed due to the Contractor's operations will not be paid for unless such pipe, of necessity, be changed in alignment or grade to allow the installation of water mains and appurtenances.

The C.W.W. Inspector will be the sole judge in determining the amount of linear feet [meters] of pipe changed.

The length of pipe conduit to be paid for will be the actual number of linear feet [meters] measured along the invert, from the beginning to the end of the new pipe installed.

1123.05 Basis of Payment. The accepted quantities of pipe sewer of the sizes and types specified will be paid for at contract unit prices bid per linear foot [meter], complete in place.

Item	Unit	Description
1123	Linear Foot [meter]	Changing Pipe Sewer

ITEM 1124 - FURNISHING, INSTALLING, AND MAINTAINING TEMPORARY WATER MAINS

1124.01 Description

1124.02 Material

1124.03 Construction

1124.04 Method of Measurement

1124.05 Basis of Payment

1124.01 Description. This item shall cover the furnishing, hauling, and installing of temporary water mains where specified on the Plans, or where directed by the C.W.W. Director. After the temporary water main has served its purpose, the Contractor shall remove it from the job site, and restore all disturbed surfaces. Pipe, for temporary water mains, furnished by the C.W.W., shall be returned to C.W.W. Distribution Storage Yard.

1124.02 Material. The Special Provisions of the Contract Plans will contain detailed information concerning temporary water mains in those instances where no alternate material can be allowed.

When such information is not specified in the Special Provisions, the Contractor shall submit to the C.W.W. Director, a proposed plan indicating the type of temporary piping to be used. The C.W.W. Director will approve, or disapprove, the proposed plan after considering the following data:

1. Diameter of pipe.
2. Pipe material. (New pipe or pipe previously used for potable water only.)
3. Type of pipe joints.
4. Method of installation.
5. Sterilization provision.
6. Adequate valving and fire hydrants.

When in the C.W.W. Director's opinion the proposed plan meets the job requirements, the Contractor will be allowed to proceed with the work under this plan.

1124.03 Construction. The method of installation shall be as indicated in the Special Provisions or as shown on the approved drawing submitted by the Contractor.

When the temporary water main furnished by the Contractor is no longer needed, it becomes the property of the Contractor, and it is his responsibility to remove it from the job site.

Water pipe furnished by the C.W.W. shall be returned to the C.W.W. Distribution Storage Yard.

1124.04 Method of Measurement. The Contractor shall only be paid for temporary water mains specifically indicated on the Contract Plans. Temporary water mains and service branches installed for the convenience of the Contractor, or such temporary work required to maintain adequate water for consumers and fire fighting purposes, will not be paid for. See 1101.053.

The Contractor will be compensated for the total linear feet [meters] of temporary water main installed including specials and fittings, as measured along the center line of the temporary water main.

1124.05 Basis of Payment. The payment for work done under this item shall be at the unit price bid, which payment shall be full compensation for all labor, material, and equipment to furnish, install, maintain, removal of the temporary water main, and restoration of disturbed surfaces.

Payment will be made at the contract price for:

Item	Unit	Description
1124	Foot (meter)	Furnishing, Installing, and Maintaining Temporary Water Mains
1124	Foot [meter]	Installing and Maintaining Temporary Water Mains

ITEM 1125 - RESETTING EXISTING VALVE BOXES COMPLETE

1125.01 Description

1125.02 Construction, 57510

1125.01 Description. This item shall cover the resetting of existing valve box hoods, lids, and telescopes, where necessary to conform to the established lines and grades of the pavement.

1125.02 Construction. The Contractor shall make the necessary excavation, reset the telescope and hood to conform with 1116.02.

Existing valve boxes that are not in good condition will not be reset. New valve boxes will be installed.

When it is necessary to raise the hood over 6 inches [15.2cm], the Contractor shall remove the hood and place a new telescope, or portion thereof, over the existing telescope.

When it is necessary to lower the hood over 6 inches [15.2cm], the Contractor shall remove the hood and cut off the telescope as directed.

If any part of the valve box assembly is damaged or broken by the Contractor's operations, he shall replace the damaged portion at his expense.

1125.03 Basis of Payment. The resetting of valve boxes complete shall be paid for at the contract unit price bid for each box reset, which price and payment shall constitute full compensation for all labor, materials, and equipment required for excavation, resetting of box, backfilling, and restoration.

Payment will be made at the contract price for:

Item	Unit	Description
1125	Each	Resetting Existing Valve Boxes Complete

ITEM 1126 - INSTALLING AND CONNECTING COPPER SERVICE PIPE

1126.01 Description

1126.02 Material

1126.03 Construction

1126.04 Method of Measurement

1126.05 Basis of Payment

1126.01 Description. This item shall cover the installation of copper service pipe where indicated on the Plans or as directed by the C.W.W. Inspector. The various sizes of pipe will be shown on the Plans and in the Proposal.

1126.02 Material. The contractor will furnish all new service pipe and fittings required to complete the work as shown, unless otherwise indicated on the Plans. Service pipe and fittings, Furnished by the contractor, requires submittal of material certification prior to installation.

All work shall be polyethylene wrapped in accordance with C.W.W. Standard Drawings 105-5 and 105-5A. All new ferrules, stop cocks, and insulating couplings required for services being renewed will be furnished by the C.W.W. and installed by the Contractor.

1126.03 Construction. The Contractor shall excavate the trench to provide 3-1/2 feet [1.067 meters] of cover over the water service.

The Contractor shall install the new pipe and fittings, make all necessary joints and connections, and properly backfill the trench, and complete restoration.

In the event that a copper to lead adaptor does not fit the existing lead service pipe, the Contractor shall furnish the necessary labor and material to wipe the joint. No additional payment will be made for a wiped joint.

All existing service branches within the trench of the renewed service branch shall be disconnected as described under Item 1130. If the existing ferrule is not within the same trench, the existing service branch must be disconnected and the Contractor will be compensated under Item 1130.

New service branch installation for property not presently being served will be installed by the C.W.W. at locations as the property owner may desire, upon proper application and payment of charges.

1126.04 Method of Measurement. The length of copper service pipe installation to be paid for will be the actual number of linear feet [meters] of service pipe and fittings installed.

1126.05 Basis of Payment. The payment for work done under this item shall be at the unit price bid, which payment will be full compensation for all labor, material and equipment required to lay the service pipe and fittings, install the ferrules, and restoration of all disturbed surfaces.

The hauling of service branch material furnished by C.W.W. shall be included in the unit price bid and will not be paid for under Item 1102.

Payment will be made at the contract price for:

Item	Unit	Description
1126	Lineal Foot [meter]	Hauling, Installing, and Connecting ____" [cm] Copper Service Pipe
1126	Lineal Foot [meter]	Furnishing, Installing, and Connecting ____" [cm] Copper Service Pipe

ITEM 1127 - LOWERING EXISTING SERVICE BRANCHES

1127.01 Description

1127.02 Construction

1127.03 Method of Measurement**1127.04 Basis of Payment**

1127.01 Description. This item shall cover the lowering of existing copper service branches, regardless of size, where shown on the Plans or as directed by the C.W.W. Inspector.

1127.02 Construction. The Contractor shall excavate the trench and lower the existing service branch to a minimum depth of 3-1/2 feet [1.067m] below the finished surface. The Contractor shall cut the pipe, disconnect the ferrule, or stop cock, when necessary to perform the operation. Lowering shall be done in a careful manner. The Contractor is responsible for any damage to the service branch that may occur during the lowering operation.

After the service branch has been lowered and adjusted to its final position, the trench shall be firmly backfilled.

If the elevation of the existing service branch indicates lowering is not necessary, the Contractor will be compensated for the excavation under Item 1120.

1127.03 Method of Measurement. Payment for this item will be based on the total linear feet [meters] of service branch lowered. Lowering of gray or ductile iron and steel pipe is covered under Item 1103.

Additional new service pipe required in the lowering of any service branch will be paid for under Item 1126. Resetting of the curb or roadway box will be paid for under Item 1132.

1127.04 Basis of Payment. The payment for work done under this item shall be at the unit price bid, which will be full compensation for all labor, material, and equipment required to lower existing service branches, backfill, and restore disturbed surfaces.

Payment will be made at the contract price for:

Item	Unit	Description
1127	Linear Foot [meters]	Lowering Existing Service Branches

ITEM 1128 - RECONNECTING EXISTING SERVICE BRANCHES**1128.01 Description****1128.02 Material****1128.03 Construction****1128.04 Method of Measurement****1128.05 Basis of Payment**

1128.01 Description. This item shall cover the reconnecting of existing service branches, including the installation of up to (3) linear feet [.915 linear meters] of copper service pipe when required for grade differential, from one main to another where shown on the Plans or as directed by the C.W.W. Inspector.

Reconnects only apply when the newly installed water main crosses the existing service branch. Where the newly installed main does not cross the existing service branch or where the grade differential exceeds 3.0 linear feet, [.915 linear meters] the Contractor shall be compensated under Item 1126.

1128.02 Material. The contractor will furnish all new service pipe and fittings required to complete the work as shown, unless otherwise indicated on the plans. Service pipe and fittings, furnished by the contractor requires submittal of material certification prior to installation.

All new ferrules required for reconnecting existing water services will be furnished by the C.W.W. and installed by the Contractor.

1128.03 Construction. The Contractor shall make all necessary excavations, disconnect the existing service branch from the old ferrule, and reconnect it to the new ferrule.

Any additional labor, tools, or material necessary to make joints or complete the reconnection shall be furnished by the Contractor.

In the event that a copper to lead adaptor does not fit the existing lead service pipe, the Contractor shall furnish the necessary labor and material to wipe the joint. No additional payment will be made for a wiped joint.

The Contractor shall also install any new service pipe required to complete the reconnection.

All work shall be polyethylene wrapped in accordance with C.W.W. Standard Drawing 105-5 and 105-5A.

1128.04 Method of Measurement. The Contractor shall be paid for each service branch reconnected. This shall include the installation of up to (3) feet [.915 meters] of copper service pipe required to complete the reconnection.

No service branch will be considered as a reconnect item where more than (3) linear feet [.915 meters] of copper service pipe is required.

1128.05 Basis of Payment. The payment for work done under this item shall be at the unit price bid, which payment will be full compensation for all labor, material, and equipment required to reconnect existing service branches, including installation of ferrules, and restoration of all disturbed surfaces.

Payment will be made at the contract price for:

Item	Unit	Description
1128	Each	Reconnecting Existing 5/8" thru 1" [1.59 cm to 2.50 cm] Service Branches
1128	Each	Reconnecting Existing 1-1/2" & 2" [3.81 cm to 5.10cm] Service Branches

1128 Each Reconnecting Existing
 1-1/2" & 2" [3.81 cm to 5.10cm]
 Service Branches

ITEM 1129 - INSTALLING STOP COCKS IN EXISTING LINES

1129.01 Description

1129.02 Material

1129.03 Construction

1129.04 Basis of Payment

1129.01 Description. This item shall cover the installing of stop cocks in existing service branches where shown on the Plans or as directed by the C.W.W. Inspector.

1129.02 Material. The contractor will furnish all new service pipe and fittings required to complete the work as shown, unless otherwise indicated on plans. Service pipe furnished by the contractor requires submittal of material certification prior to installation.

All new stop cocks will be furnished by C.W.W. and installed by the Contractor, unless otherwise noted on the plans.

1129.03 Construction. The Contractor shall make the necessary excavations, install the new stop cock where indicated, check the existing stop cock joints for tightness in the presence of the C.W.W. Inspector, firmly backfill the excavations, and restore all disturbed surfaces. This item shall include the installation of a short piece of copper pipe when necessary.

1129.04 Basis of Payment. The unit price bid for installing stop cocks in existing lines, including the installation of a short piece of service pipe, shall be full compensation for all labor, material, and equipment including restoration of disturbed surfaces required to complete the work in accordance with the above specifications.

The hauling of service branch material furnished by C.W.W. shall be included in the unit price bid and will not be paid for under Item 1102.

Payment will be made at the contract price for:

Item	Unit	Description
1129	Each	Hauling and Installing ____" [cm] Stop Cocks in Existing Lines
1129	Each	Furnish and Install ____" [cm] Stop Cocks in Existing Lines

ITEM 1130 - DISCONNECTING EXISTING SERVICE BRANCHES 5/8" [1.59cm] THROUGH 2" [5.10cm]

1130.01 Description